

A blistering final week and a return to drought transformed June from a mildly hot month into a scorcher, rekindling memories of the brutal 2011 summer. Temperatures routinely reached triple-digits across Oklahoma during the month's final week. According to data from the Oklahoma Mesonet, the statewide average temperature finished at 79.2 degrees to rank as the 19th warmest June on record, 2.7 degrees above normal. Statewide average records date back to 1895. June's warmth follows a pattern that began over two years ago with 22 out of the last 27 months being warmer than normal. The January-June statewide average entered the record books at 60.1 degrees, 4.9 degrees above normal. That obliterates the previous record mark of 58.9 degrees from the same period in 2006 as the state continues on a possible path towards its warmest year on record. Oklahoma's warmest year on record came in 1954 with a statewide average of 62.8 degrees. The January-June statewide average that year was 57.4 degrees.

June 2012 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	112°F	Buffalo	26 27
Low Temperature	44°F	Oilton, Cookson	1
High Precipitation	6.86 in.	Skiatook	--
Low Precipitation	0.45 in.	Cloudy	--

PRECIPITATION

The month was also the 29th driest June on record with a statewide average precipitation total of 2.54 inches, nearly 2 inches below normal. A few localized areas received significant moisture during the first two weeks of the month before the state adopted the much more summer-like pattern. The Mesonet site at Skiatook led June's rain totals with 6.86 inches while the small town of Cloudy brought up the rear with 0.45 inches. The state saw significant drought relief from October 2011 through March of this year, but the rains have since dwindled. The southeast and east central sections of the state were below 50 percent of normal since April 1, a slowdown that encompassed the entirety of Oklahoma's primary rainy season. Statewide, the average total of 8.2 inches is 4.5 inches below normal, the 14th driest such period on record.

TEMPERATURE

The highest temperature recorded during the month was 112 degrees at Buffalo and Freedom on the 26th and again at Buffalo on the 27th. High temperatures across parts of the state were in the 70s as late as June 21. The lowest temperature recorded during the month was 44 degrees at Oilton and Cookson on the first.

JUNE DAILY HIGHLIGHTS

JUNE 1-7: A persistent upper-level low pressure system brought a very rainy first week of the month. There were plenty of storms mixed in with the showers. Plenty of large hail and high wind reports were noted on the third, including a 73 mph wind gust in Custer County. Widespread flooding was reported in northeast Oklahoma where 4-6 inches of rain fell. The upper-level low moved off to the southeast on the seventh and the rains quickly came to an end. Final rainfall totals ranged from 1-2 inches for the most part, other than the areas in the northeast and south central sections of the state where higher localized totals occurred.

June 2012 Statewide Statistics

Temperature

	Average	Depart.	Rank (1895-2012)
Month (June)	79.2°F	2.7°F	19th Warmest
Year-to-Date (Jan-June)	60.3°F	5.0°F	1st Warmest

Precipitation

	Average	Depart.	Rank (1895-2012)
Month (June)	2.54 in.	-1.72 in.	29th Driest
Year-to-Date (Jan-June)	16.60 in.	-2.55 in.	51st Driest

Depart. = departure from 30-year normal

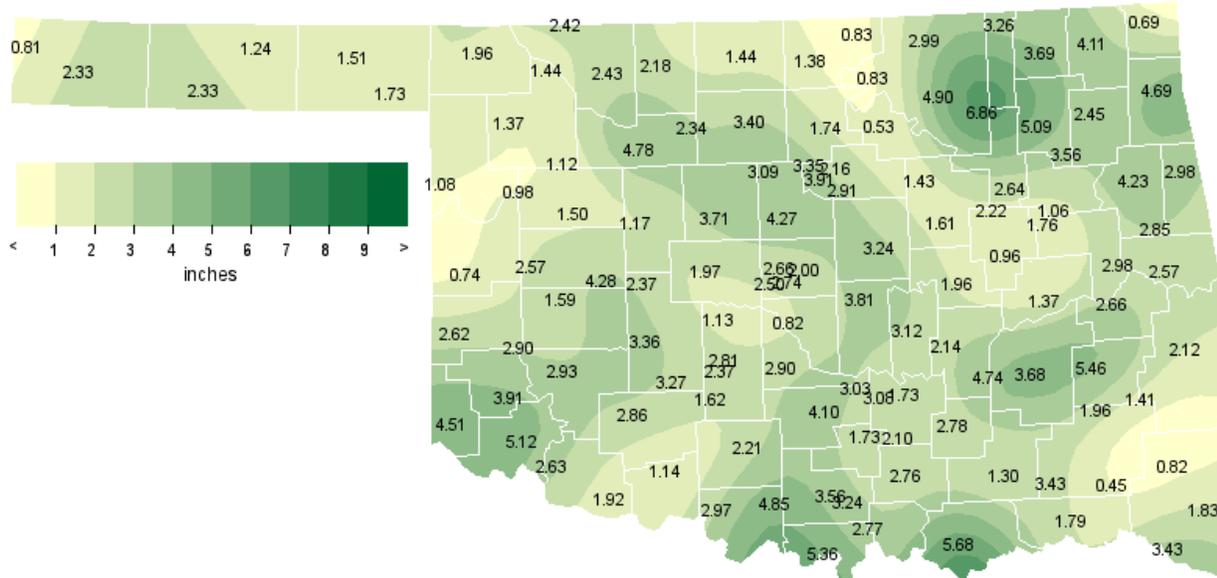
JUNE 8-10: This three-day period was marked by fair skies and lots of hot weather. Highs reached into the 100s by the 10th with Altus recording 109 degrees.

JUNE 11-16: A weak cold front on the 11th helped generate strong to severe storms across southern Oklahoma. The storms continued overnight into the 12th. Reports of scattered large hail and strong winds occurred with the storms. The storms continued throughout the period. There was no widespread severe weather, nor widespread heavy rains, but much of southwestern, central and southeastern Oklahoma received from 1-2 inches. The storms eventually moved to the east late on the 16th. The rain did manage to keep the temperatures in the 80s and 90s.

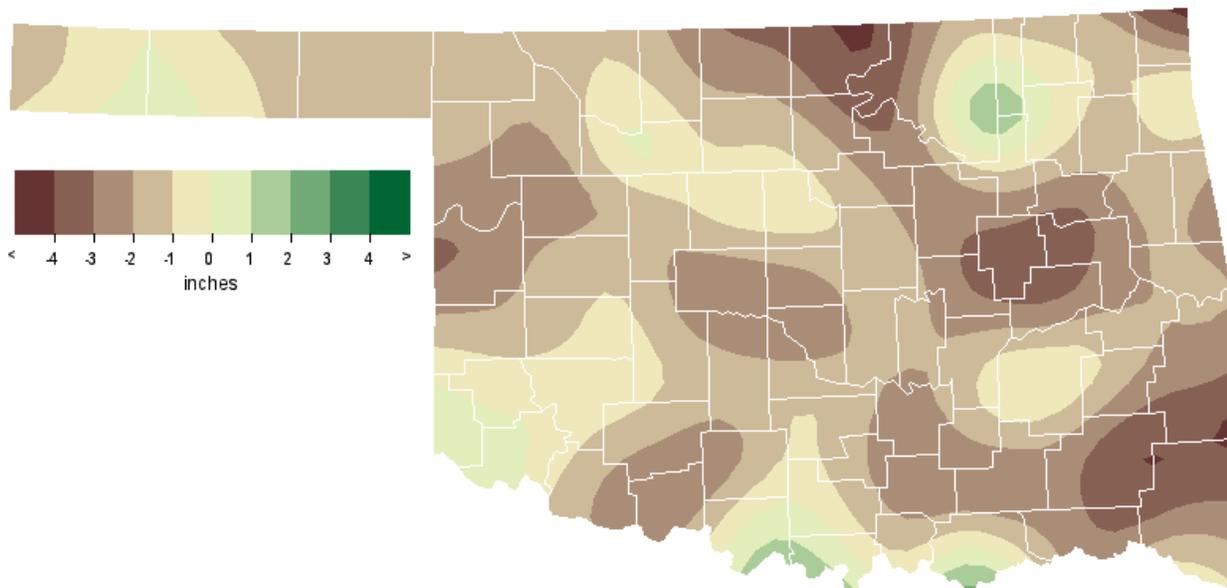
JUNE 17-21: Very little rainfall occurred during this period, right up until the first day of summer on June 21. Oddly enough, a cold front greeted the state that day and brought cooler temperatures and a few storms. Highs were mostly in the 80s and 90s during this period, but a few stray hundreds still appeared in northwestern Oklahoma. The heaviest storms were isolated near Grady and Caddo counties on the 21st with Fort Cobb receiving 2.77 inches.

JUNE 22-30: The final nine days of the month were unbearably hot with highs mostly in the 100s through the 30th. Temperatures rose into the 110s in several places from the 26th through the 28th. Buffalo recorded 112 degrees twice, on the 26th and 27th, to mark the month's highest temperature.

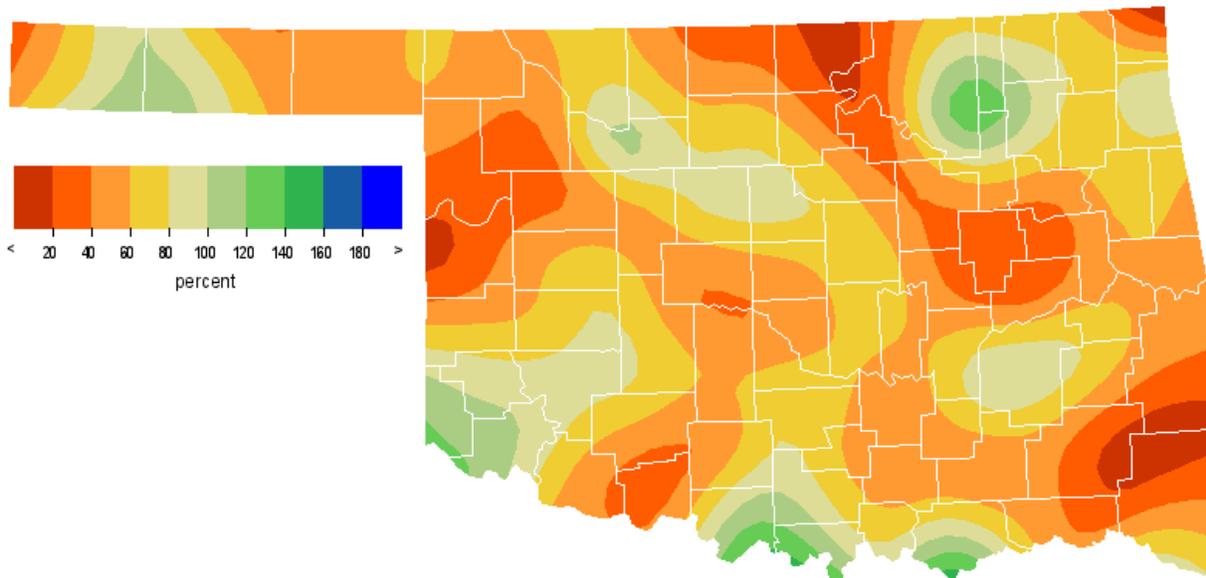
JUNE 2012 OBSERVED PRECIPITATION



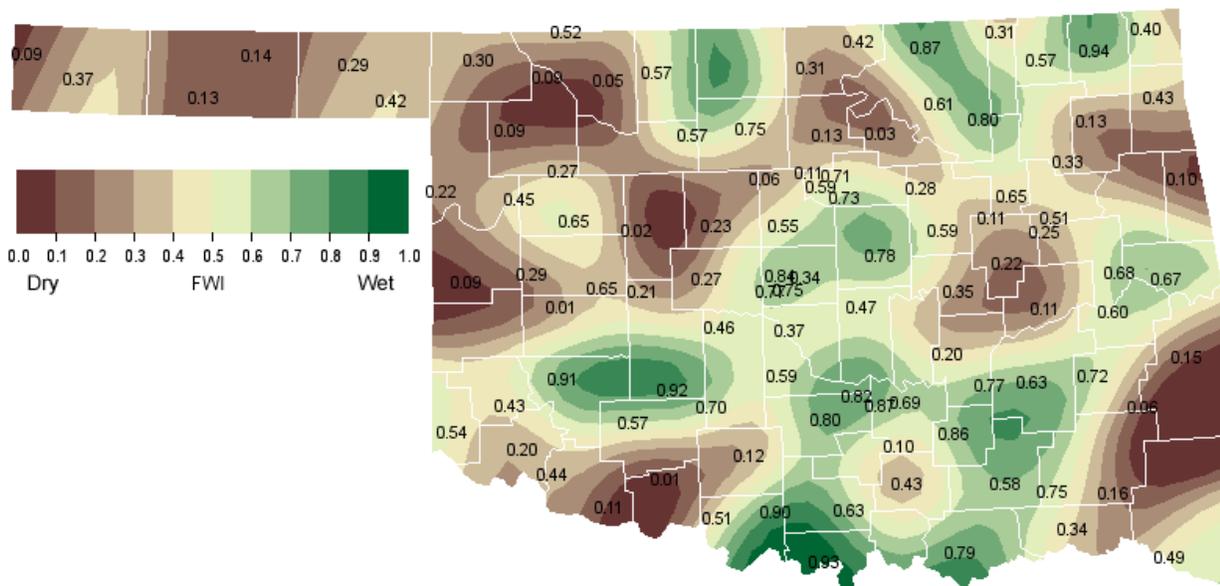
JUNE 2012 DEPARTURE FROM NORMAL PRECIPITATION



JUNE 2012 PERCENT OF NORMAL PRECIPITATION



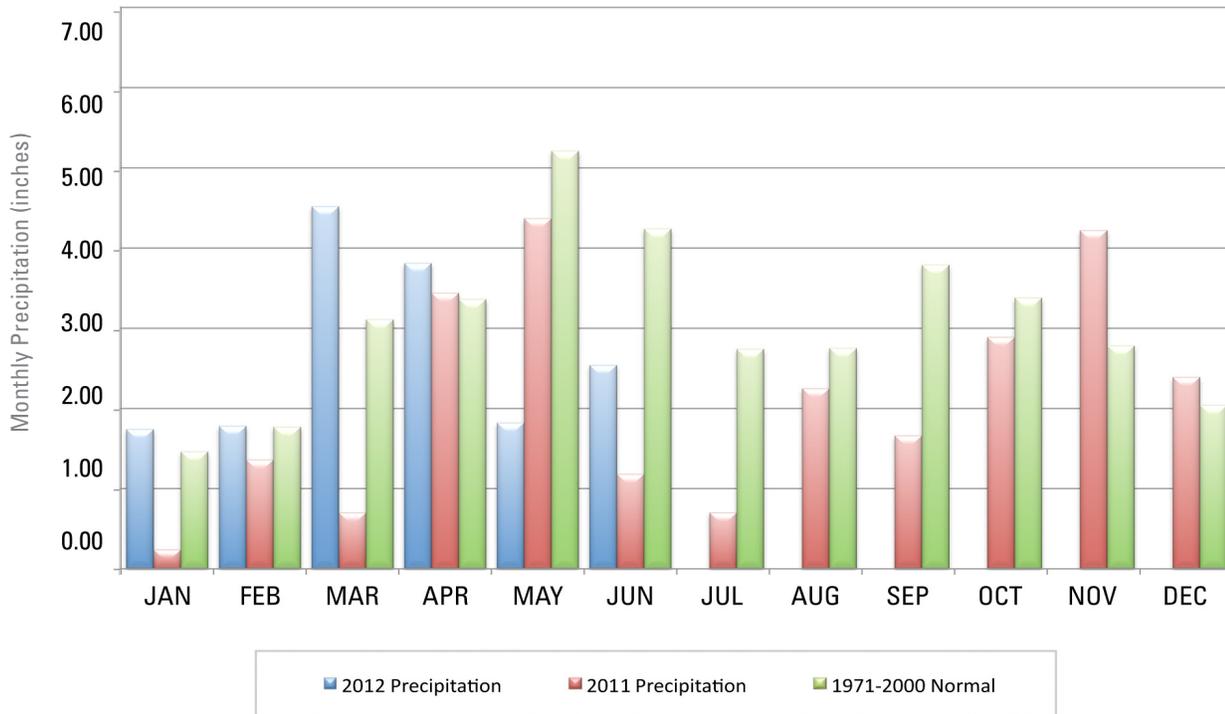
JUNE 2012 AVERAGE SOIL MOISTURE AT 25CM



MESONET MONTHLY SUMMARY FOR JUNE 2012

NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY	NAME	MEAN TEMP	HIGH TEMP	LOW TEMP	DAY	HDD	CDD	TOT PPT	HIGH 24-HR	DAY		
PANHANDLE																					
Arnett	79.5	108	26	53	8	0	434	1.08	.62	5	Goodwell	78.8	107	27	51	2	0	413	2.33	1.03	2
Beaver	80.8	111	27	48	1	0	475	1.51	.62	2	Hooker	80.2	110	27	51	1	0	455	1.24	.49	14
Boise City	76.3	105	28	53	1	0	338	2.33	1.67	4	Kenton	77.5	106	27	53	1	0	376	.81	.45	4
Buffalo	81.9	112	26	52	1	0	506	1.96	.92	2	Slapout	79.7	110	26	50	1	0	442	1.73	.68	14
NORTH CENTRAL																					
Alva	80.3	111	26	49	1	8	467	2.43	.73	14	May Ranch	79.7	110	27	49	1	8	450	2.42	1.45	2
Blackwell	78.8	107	26	47	1	10	423	1.38	.64	15	Medford	79.1	107	26	48	1	10	432	1.44	.82	14
Breckinridge	78.5	105	26	45	1	11	416	3.40	1.15	15	Newkirk	78.4	105	26	48	1	9	412	.83	.31	21
Cherokee	80.2	110	26	50	1	8	462	2.18	.78	3	Red Rock	78.8	106	26	47	1	9	423	1.74	1.03	15
Fairview	80.2	109	26	50	1	8	462	4.78	1.42	3	Seiling	80.0	110	26	50	1	3	453	1.12	.52	2
Freedom	81.2	112	26	50	1	5	490	1.44	.58	14	Woodward	80.4	109	26	52	1	0	462	1.37	.60	2
Lahoma	78.8	107	26	49	1	9	422	2.34	.63	3											
NORTHEAST																					
Bixby	78.8	103	25	53	1	3	418	2.64	1.63	4	Nowata	76.8	100	28	47	1	8	362	3.69	1.75	21
Burbank	77.5	105	26	47	1	9	385	.83	.35	15	Pawnee	79.2	107	26	49	1	8	434	.53	.31	15
Claremore	78.0	101	28	48	1	7	398	5.09	2.83	3	Porter	79.2	104	25	51	1	4	431	1.06	.48	4
Copan	78.0	101	28	48	1	7	396	3.26	2.09	21	Pryor	77.4	101	28	48	1	6	379	2.45	1.65	21
Foraker	76.2	101	25	45	1	10	347	2.99	1.76	4	Skiatook	78.2	101	28	48	1	8	405	6.86	3.72	3
Inola	78.0	103	28	48	1	6	397	3.56	1.47	4	Vinita	76.1	99	28	46	1	9	341	4.11	1.78	21
Jay	77.0	101	28	45	1	8	368	4.69	2.36	3	Wynona	77.3	101	26	48	1	8	377	4.90	2.28	4
Miami	77.5	101	26	48	1	8	384	.69	.54	21											
WEST CENTRAL																					
Bessie	80.9	109	26	55	2	0	476	1.59	.46	21	Putnam	79.7	108	26	52	1	2	442	1.50	.58	21
Butler	80.4	110	26	54	8	0	463	2.57	1.48	3	Retrop	80.3	107	26	55	8	0	460	2.90	2.19	13
Camargo	79.6	110	26	51	8	0	438	.98	.48	2	Watonga	80.4	109	26	51	1	5	467	1.17	.53	3
Cheyenne	80.0	107	26	54	2	0	449	.74	.27	2	Weatherford	79.8	107	26	53	2	0	445	4.28	3.32	6
Erick	80.1	110	26	54	8	0	452	2.62	1.69	13											
CENTRAL																					
Acme	79.3	105	26	52	1	1	430	1.62	.48	6	Ninnekah	78.7	105	26	54	1	1	413	2.37	.81	5
Bowlegs	78.4	101	26	49	1	5	408	3.12	1.50	6	Norman	79.0	104	26	52	1	6	426	.82	.34	6
Bristow	77.9	105	25	46	1	8	394	1.61	1.06	15	Oilton	78.5	106	26	44	1	9	414	1.43	.59	15
Lake Carl Blac	77.9	102	26	47	1	8	395	3.35	1.19	15	OKC East	78.8	104	26	50	1	8	423	2.74	1.34	15
Chandler	78.6	100	26	50	1	7	413	3.24	1.49	15	OKC North	79.4	102	26	52	1	7	438	2.66	1.44	15
Chickasha	79.6	107	26	54	1	0	437	2.81	1.32	5	OKC West	79.2	102	26	53	2	6	432	2.50	1.36	15
El Reno	77.1	104	26	46	1	9	373	1.97	.77	3	Okemah	78.8	104	26	50	1	5	419	1.96	.76	15
Guthrie	79.3	101	25	51	1	7	436	4.27	2.08	15	Perkins	79.2	103	26	50	1	8	433	2.91	1.46	15
Kingfisher	79.6	108	26	49	1	9	446	3.71	1.92	15	Shawnee	79.7	103	26	50	1	5	445	3.81	2.17	15
Marena	77.8	99	26	50	1	9	394	3.91	1.50	15	Spencer	78.9	102	26	48	1	9	425	2.00	.94	15
Minco	78.2	103	26	52	1	4	400	1.13	.37	6	Stillwater	78.6	103	26	50	1	7	416	2.16	1.21	15
Marshall	78.8	103	26	47	1	10	425	3.09	.92	15	Washington	78.2	104	26	52	1	2	397	2.90	1.14	13
EAST CENTRAL																					
Cookson	78.0	103	25	44	1	8	396	2.85	1.73	4	Sallisaw	79.1	101	28	51	1	3	426	2.57	1.12	4
Eufaula	80.6	104	26	54	2	2	470	1.37	.91	4	Stigler	78.6	102	25	50	1	4	411	2.66	1.63	4
Haskell	78.3	103	25	51	1	5	405	1.76	.88	15	Stuart	78.4	99	26	52	1	3	404	4.74	2.53	12
Hectorville	79.5	104	25	49	1	6	441	2.22	1.19	4	Tahlequah	77.7	100	28	45	1	7	389	4.23	2.66	4
Holdenville	78.8	101	25	50	1	5	420	2.14	1.08	15	Webbers Falls	79.2	102	28	54	1	2	428	2.98	2.19	4
McAlester	77.9	100	26	52	1	4	391	3.68	1.43	12	Westville	77.7	101	28	47	1	7	388	2.98	.82	4
Okmulgee	78.3	104	25	49	1	5	404	.96	.62	4											
SOUTHWEST																					
Altus	81.8	109	10	59	2	0	505	5.12	2.16	6	Hollis	81.4	109	26	58	8	0	492	4.51	1.31	13
Apache	78.4	102	26	54	2	0	403	3.27	1.19	5	Mangum	80.5	110	26	55	8	0	464	3.91	1.34	6
Fort Cobb	79.0	104	26	55	8	0	420	3.36	2.77	21	Medicine Park	80.0	106	26	56	2	0	450	2.86	.92	5
Grandfield	83.0	111	26	58	1	0	539	1.92	.85	6	Tipton	82.6	110	26	59	8	0	528	2.63	.81	13
Hinton	79.2	105	26	54	2	3	428	2.37	1.23	6	Walters	*****	***	***	***	***	*****	*****	*****	*****	***
Hobart	81.0	109	26	55	8	0	479	2.93	1.86	13											
SOUTH CENTRAL																					
Ada	78.9	102	26	51	1	3	420	1.73	.62	6	Madill	79.6	102	26	55	1	0	437	2.77	1.53	6
Ardmore	79.9	102	26	56	1	0	447	3.24	.89	11	Newport	79.5	101	26	55	1	0	434	3.56	1.12	6
Burneyville	80.4	103	26	54	1	0	462	5.36	1.87	11	Pauls Valley	78.9	102	26	54	1	1	418	4.10	1.77	6
Byars	78.4	100	26	50	1	5	407	3.03	.90	6	Ringling	80.3	103	26	57	1	0	460	4.85	3.59	6
Centrahoma	78.5	101	26	51	1	3	407	2.78	.93	6	Sulphur	79.2	104	26	51	1	2	427	1.73	.62	6
Durant	80.0	101	26	56	1	0	449	5.68	1.94	6	Tishomingo	78.7	103	26	52	1	0	412	2.76	.98	6
Fittstown	78.0	102	25	53	1	2	391	2.10	1.05	6	Vanoss	78.1	100	26	52	1	3	396	3.08	1.16	11
Ketchum Ranch	79.5	102	26	56	1	0	434	2.21	1.09	6	Waurika	80.4	105	26	56	1	0	461	2.97	.75	6
Lane	79.4	103	25	54	1	0	431	1.30	.55	15											
SOUTHEAST																					
Antlers	78.0	100	25	49	1	2	391	3.43	2.43	12	Idabel	79.9	103	25	55	1	0	448	3.43	1.48	5
Antlers	*****	***	***	***	***	*****	*****	*****	*****	***	Mt Herman	80.4	108	25	50	1	0	461	.82	.31	5
Broken Bow	78.7	105	25	54	1	0	410	1.83	1.50	5	Talihina	81.0	107	27	53	1	0	480	1.41	.35	16
Clayton	80.0	106	26	52	1	2	450	1.96	.98	15	Wilburton	78.6	100	26	48	1	4	413	5.46	2.13	15
Cloudy	80.1	105	25	52	1	0	452	.45	.28	12	Wister	79.7	106	28	51	1	1	441	2.12	.74	4
Hugo	80.3	103	25	55	1	0	459	1.79	.95	12											

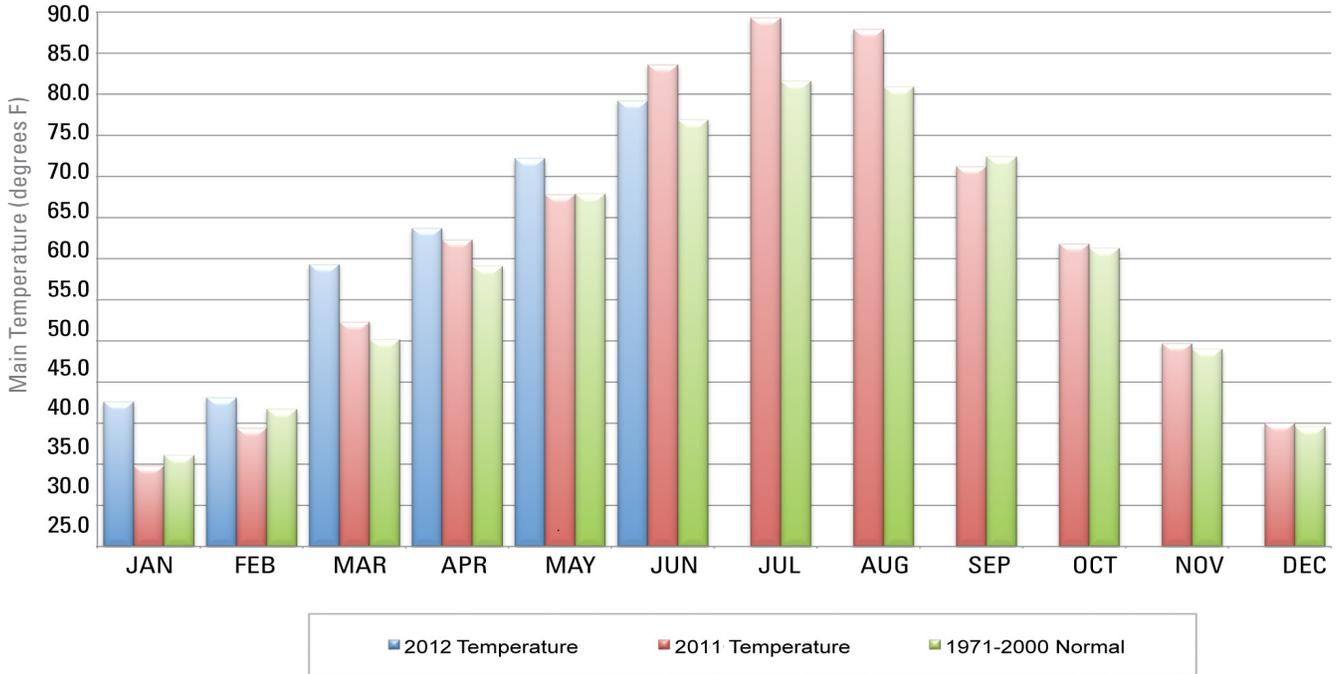
2011 AND 2012 STATEWIDE PRECIPITATION MONTHLY TOTALS VS. NORMAL



June 2012 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	June-11
Panhandle	1.62	-1.31	28th Driest	7.70 (1962)	0.01 (1924)	1.03
North Central	2.07	-1.87	20th Driest	11.10 (2007)	0.43 (1933)	2.51
Northeast	3.16	-1.46	31st Driest	12.06 (2007)	0.08 (1933)	1.36
West Central	2.04	-1.82	28th Driest	10.48 (2007)	0.32 (1910)	1.19
Central	2.59	-1.98	32nd Driest	13.65 (2007)	0.00 (1914)	1.52
East Central	2.70	-2.16	25th Driest	12.69 (1935)	0.00 (1914)	0.49
Southwest	3.09	-1.07	50th Driest	10.82 (2007)	0.56 (1933)	0.56
South Central	3.13	-1.51	43rd Driest	10.91 (2007)	0.00 (1914)	0.30
Southeast	2.27	-2.43	28th Driest	11.00 (1945)	0.00 (1914)	0.91
Statewide	2.54	-1.72	29th Driest	9.84 (2007)	0.46 (1933)	1.13

2011 AND 2012 STATEWIDE TEMPERATURE MONTHLY TOTALS VS. NORMAL



June 2012 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	June-11 (F)
Panhandle	79.3	4.9	8th Warmest	82.0 (1953)	67.7 (1903)	81.3
North Central	79.6	2.8	21st Warmest	85.7 (1953)	69.7 (1903)	83.5
Northeast	77.7	2.0	27th Warmest	83.7 (1953)	68.9 (1903)	81.8
West Central	80.2	3.8	17th Warmest	85.7 (2011)	69.1 (1903)	85.7
Central	78.7	1.9	27th Warmest	84.4 (1953)	69.9 (1903)	83.9
East Central	78.6	2.4	22nd Warmest	84.4 (1953)	69.8 (1903)	83.4
Southwest	80.8	2.4	21st Warmest	87.4 (2011)	71.5 (1903)	87.4
South Central	79.3	1.6	33rd Warmest	85.2 (1953)	71.1 (1903)	84.5
Southeast	79.7	3.3	15th Warmest	83.9 (1953)	70.3 (1903)	82.0
Statewide	79.2	2.7	19th Warmest	84.6 (1953)	69.8 (1903)	83.6

MESONET EXTREMES FOR JUNE 2012

Climate Division	High Temp (F)			Low Temp (F)			High Monthly Rainfall (inches)		High Daily Rainfall (inches)		
	Day	Station	Day	Station	Day	Station	Station	Day	Station		
Panhandle	112	26th	Buffalo	48	1st	Beaver	2.33	Boise City	1.67	4th	Boise City
North Central	112	26th	Freedom	45	1st	Breckinridge	4.78	Fairview	1.45	2nd	May Ranch
Northeast	107	26th	Pawnee	45	1st	Jay	6.86	Skiatook	3.72	3rd	Skiatook
West Central	110	26th	Camargo	51	1st	Watonga	4.28	Weatherford	3.32	6th	Weatherford
Central	108	26th	Kingfisher	44	1st	Oilton	4.27	Guthrie	2.17	15th	Shawnee
East Central	104	26th	Eufaula	44	1st	Cookson	4.74	Stuart	2.66	4th	Tahlequah
Southwest	111	26th	Grandfield	54	2nd	Hinton	5.12	Altus	2.77	21st	Fort Cobb
South Central	105	26th	Waurika	50	1st	Byars	5.68	Durant	3.59	6th	Ringling
Southeast	108	25th	Mt Herman	48	1st	Wilburton	5.46	Wilburton	2.43	12th	Antlers
Statewide	112	26th	Buffalo	44	1st	Oilton	6.86	Skiatook	3.72	3rd	Skiatook

JULY OUTLOOK

July in Oklahoma means summer. By the beginning of the month, the jet stream and its accompanying weather systems have retreated to the U.S.-Canadian border. The western arm of a broad area of high pressure at the earth's surface, centered in the central Atlantic Ocean, has migrated northward and spreads across the state. Winds are persistently from the south, but not as strong as during preceding months. As a result, the seventh month of the year is the Oklahoma's warmest with an average temperature of 82 degrees and is the 4th driest month with a statewide-averaged precipitation of 2.73 inches.

Oklahoma's hottest July, at least since record keeping began in 1895, occurred in 2011. That month produced the highest statewide-averaged temperature (89.3 degrees) of any month for any state during the period of record. The thermometer indicated 120 degrees at Alva July 18, 1936, at Altus July 19, 1936, and at Tishomingo July 26, 1943. The lowest July statewide-averaged monthly temperature on record was 76.4 degrees in 1906. The lowest temperature ever reported in Oklahoma during July is 41 degrees at Goodwell, July 15, 1915. Humidity, vegetation, and elevation contribute to the variations in temperature across the state. The higher elevation and somewhat drier air in the panhandle lead to cooler nights and a greater range in daily temperatures than in other parts of the state. The more humid air in the southeast typically warms less in the daytime, but also retains more heat through the night. Southwestern Oklahoma suffers the most from the heat.

July precipitation, all rainfall unless you count an occasional hailstorm, is primarily a result of localized events. While the panhandle enjoys its summer rainy season and rain certainly doesn't disappear from north central Oklahoma, the forested southeast, though drier than it is in other months, still receives more precipitation than other parts of the state. The wettest July, based on a statewide average of rainfall, was 1950 (9.26 inches). The driest July occurred in 1980 (0.41 inches).

Oklahoma averages only 2.1 tornadoes in July each year. Since 1950, the July record for tornadoes is seven in 1956. Fifteen of those 52 months have been free of confirmed tornadoes. In the absence of well-organized systems, the vast majority of recorded July tornadoes have been of the weaker variety, and multiple occurrences on the same day are extremely rare. Only one fatality has been attributable to a tornado since 1950, that occurring in Murray County in 1955. Lightning, thunderstorm-induced winds, locally heavy rain, and, of course, heat are more likely to provide Oklahoma with its "weather misery" during the month.

Temperature

Mean	82.0 degrees
Warmest July	2011, 89.3 degrees
Coollest July	1906, 76.4 degrees
Hottest recorded	120 degrees, Alva, July 18, 1936 Altus, July 19, 1936 Tishomingo, July 26, 1943
Coldest recorded	41 degrees, Goodwell, July 15, 1915
Hottest Location	Waurika, 85.1 degrees
Coollest Location	Boise City, 77.2 degrees

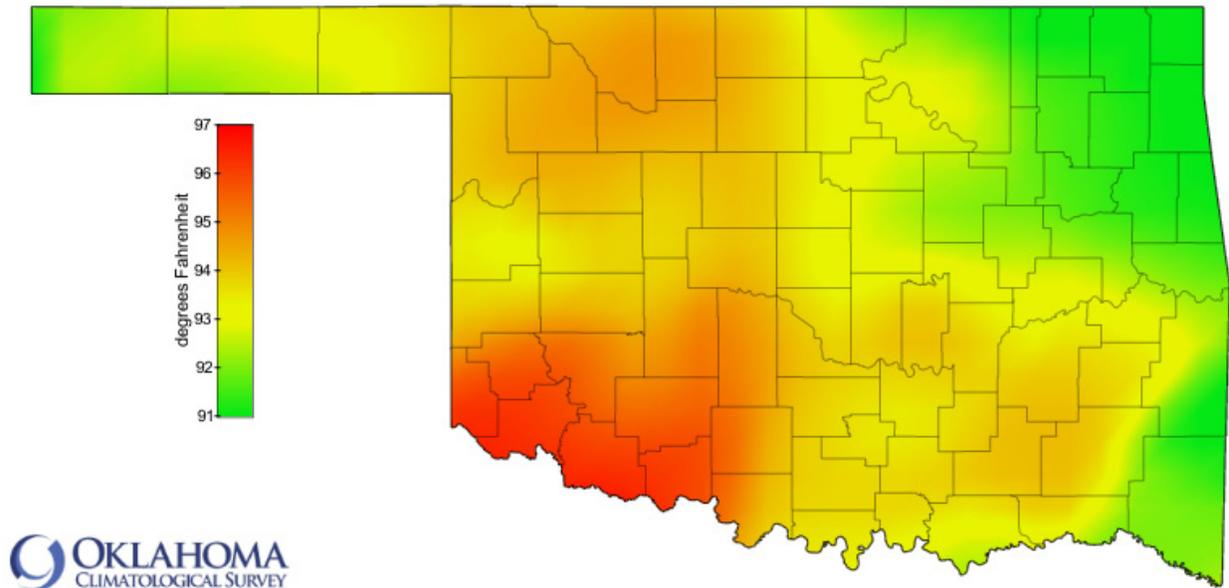
Precipitation

Mean	2.73 inches
Wettest July	1950, 9.26 inches
Driest July	1980, 0.41 inches
Wettest location	Carnasaw Fire Tower (McCurtain County), 4.50 inches
Driest location	Altus and Reydon, 1.77 inches
Most recorded	18.83 inches, Wewoka, 1950

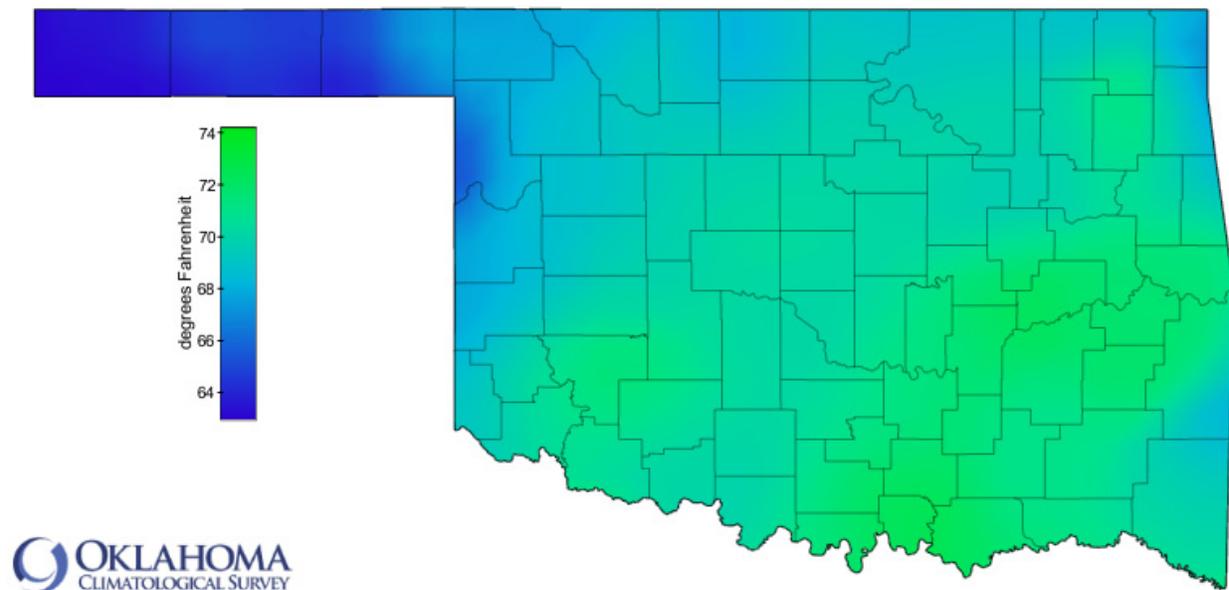
Tornadoes

Average July Tornadoes	1.8
Most	7 (1956)

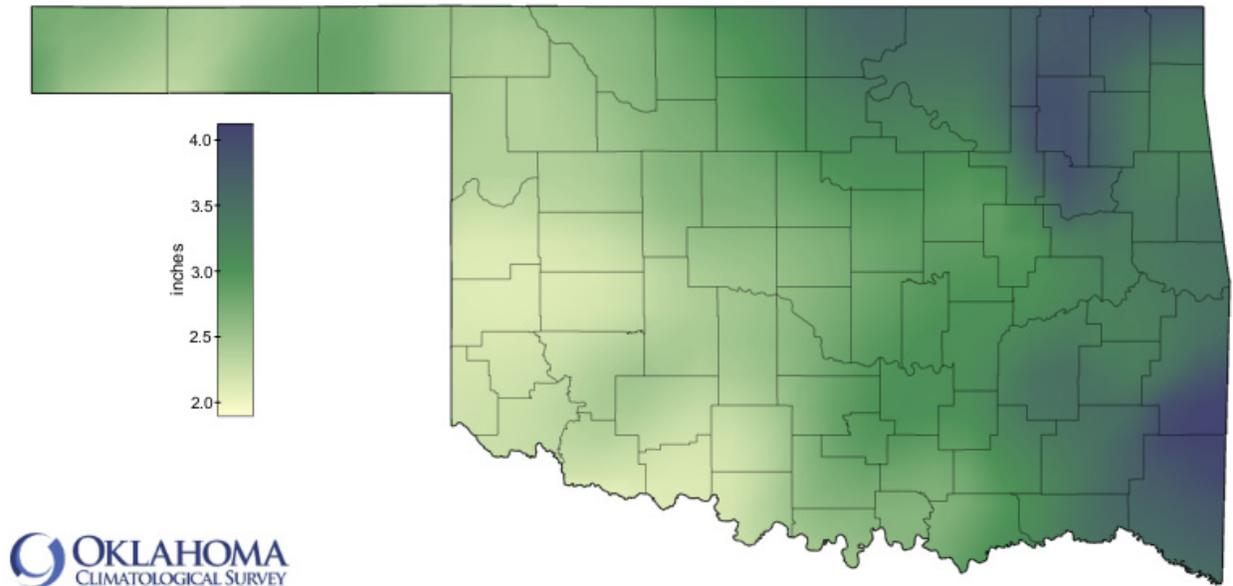
JULY NORMAL DAILY MAXIMUM TEMPERATURE (1981-2010)



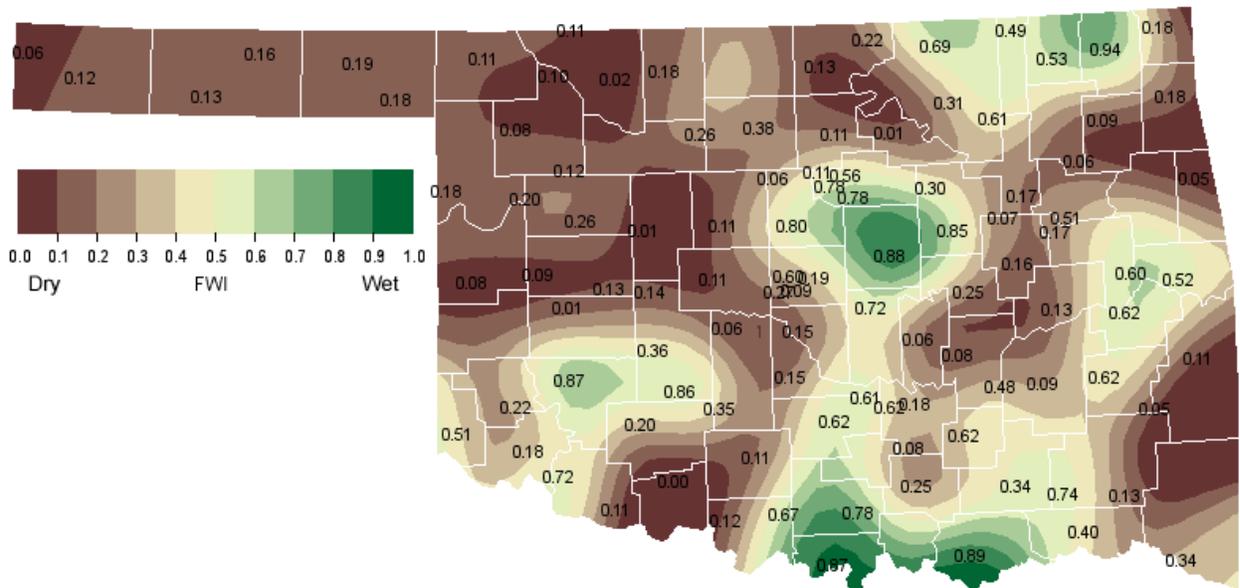
JULY NORMAL DAILY MINIMUM TEMPERATURE (1981-2010)



JULY NORMAL PRECIPITATION (1981-2010)



JULY 1, 2012 SOIL MOISTURE CONDITIONS AT 25CM



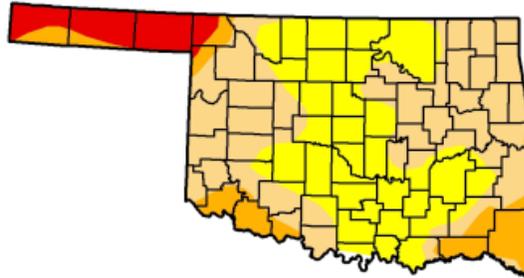
U.S. Drought Monitor

Oklahoma

July 3, 2012
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.35	99.65	61.12	18.25	7.58	0.00
Last Week (06/26/2012 map)	0.32	99.68	48.03	17.00	3.90	0.00
3 Months Ago (04/03/2012 map)	66.66	33.34	18.58	10.92	3.77	0.01
Start of Calendar Year (12/27/2011 map)	14.83	85.17	78.76	50.55	27.48	3.33
Start of Water Year (09/27/2011 map)	0.00	100.00	100.00	100.00	78.97	66.42
One Year Ago (06/28/2011 map)	0.13	99.87	75.59	55.96	41.22	32.55



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu>



USDA

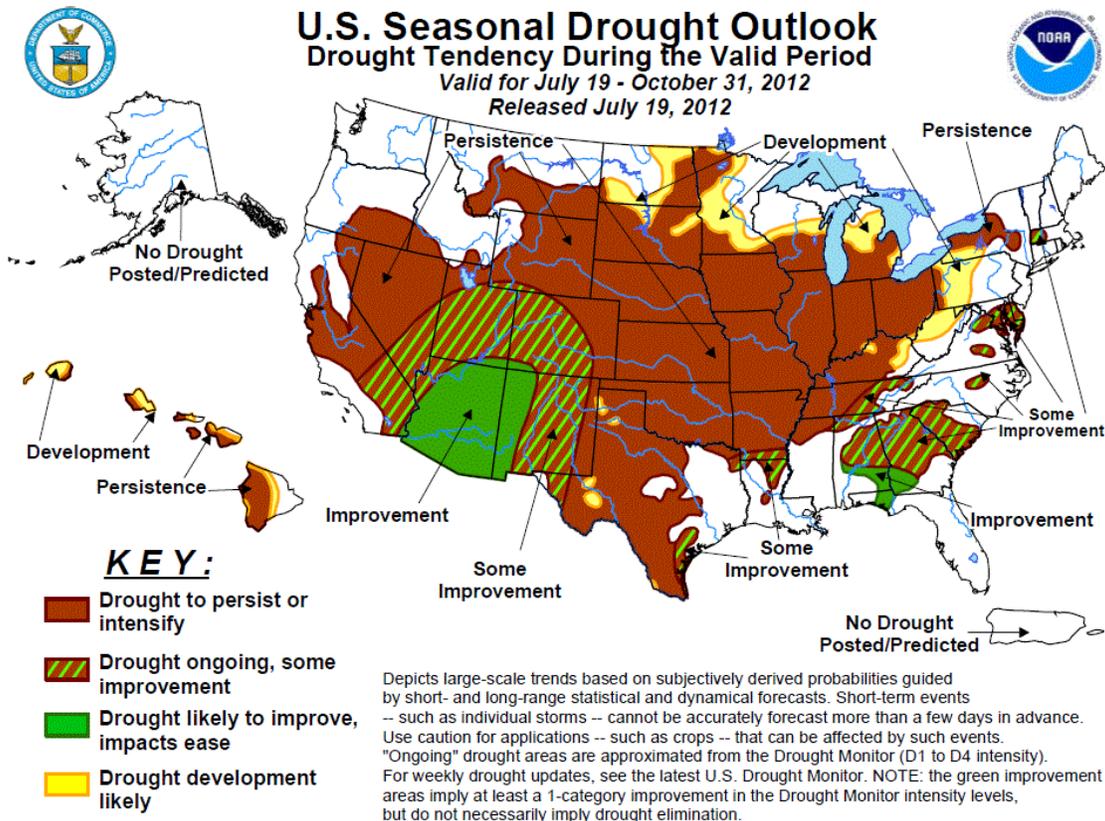


National Drought Mitigation Center

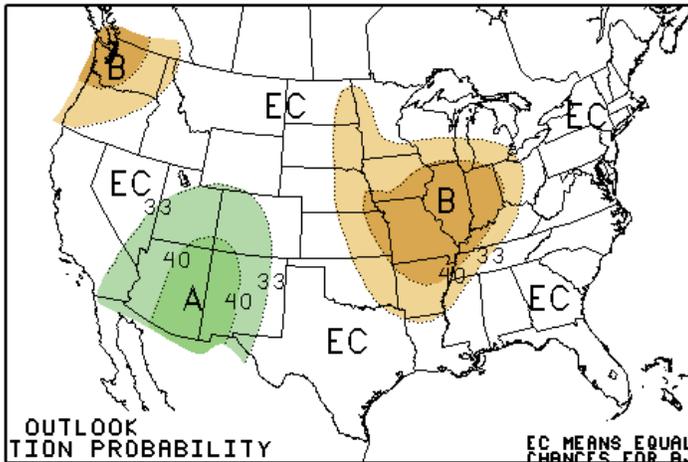


NOAA

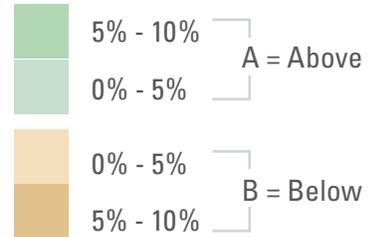
Released Thursday, July 5, 2012
Rich Tinker, Climate Prediction Center/NOAA



JULY 2012 U.S. PRECIPITATION FORECAST

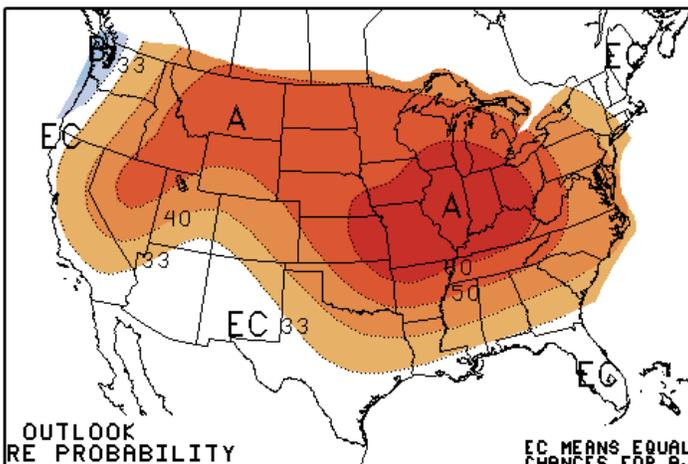


Percent Likelihood of Above or Below Average Precipitation*

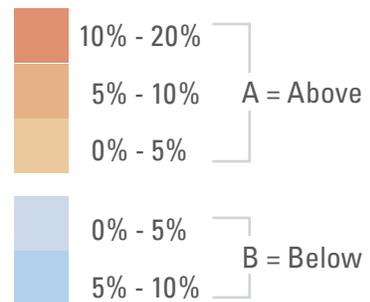


*EC indicates no forecasted anomalies due to lack of model skill.

JULY 2012 U.S. TEMPERATURE FORECAST



Percent Likelihood of Above or Below Average Temperatures*



*EC indicates no forecasted anomalies due to lack of model skill.

JULY CLIMATE NORMALS

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	94.2	65.6	79.9	2.50
2	94.9	69.4	82.2	2.98
3	92.8	69.9	81.4	3.14
4	94.4	69.2	81.8	2.10
5	93.7	70.5	82.1	2.53
6	92.7	70.1	81.5	2.97
7	96.0	70.1	83.1	2.12
8	94.3	71.1	82.7	2.53
9	93.4	69.0	81.2	3.59
Statewide	94.0	69.6	81.8	2.73

Oklahoma Climate Divisions



INTERPRETATION INFORMATION

MEAN DAILY TEMPERATURE: Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this may differ from the “true” daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

DEGREE DAYS: Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value.

SEVERE WEATHER REPORTS: Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

SOIL MOISTURE: The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

ADDITIONAL RESOURCES

SUNRISE / SUNSET TABLES

U.S. Naval Observatory: <http://aa.usno.navy.mil/data>

SEVERE STORM REPORTS

Storm Prediction Center: <http://spc.noaa.gov/climo/>

National Climatic Data Center (more than about 4-5 months old):

<http://www4.ncdc.noaa.gov/cgi-win/wwwcgi.dll?wwEvent~Storms>

SEASONAL OUTLOOKS

Climate Prediction Center:

http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html

CLIMATE CALENDARS AND OTHER LOCAL WEATHER AND CLIMATE INFORMATION

Oklahoma Climatological Survey:

<http://climate.mesonet.org> or <http://climate.ok.gov/>



Oklahoma Climatological Survey is the State Climate Office for Oklahoma

Dr. Kevin Kloesel Director

Dr. Renee McPherson State Climatologist

EDITOR

Gary D. McManus Associate State Climatologist

CONTRIBUTORS

Gary D. McManus

Dr. Mark A. Shafer Director of Climate Services

Howard Johnson Associate State Climatologist (Ret.)

DESIGN

Ada Shih Graphic Designer

Lacie Webb Graphic Designer Student Assistant

For more information, contact:

Oklahoma Climatological Survey

The University of Oklahoma

120 David L. Boren Blvd., Suite 2900

Norman, OK 73072-7305

TEL: 405-325-2541

FAX: 405-325-2550

E-MAIL: ocs@ou.edu

WEBSITE: <http://climate.ok.gov>